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1 4. The method as defined in claim 1, wherein the first
2 signal conducting means and the second signal conducting
3 means each comprise a single conductor.

1 5. The method as defined in claim 1, wherein the first
2 circuit board and the second circuit board are multilayer
3 circuit boards, wherein the first electrically conductive
4 shield and the second electrically conductive shield are
5 respective electrically conductive layers of the first
6 circuit board and the second circuit board.

1 6. The method as defined in claim 5, wherein the first
2 electrically conductive shield and the second electrically
3 conductive shield are formed by the respective ground plane
4 layers of the first circuit board and the second circuit
5 board.

1 7. The method as defined in claim 6, wherein the first
2 signal conducting means and the second signal conducting
3 means are formed on respective signal layers of the first
4 circuit board and the second circuit board, wherein the
5 signal layers are disposed beneath the ground plane layers
6 in the first circuit board and the second circuit board.

1 8. The method as defined in claim 1, wherein the signal is
2 carries data at a rate on the order of 1 Gb/s and above.

1 9. The method as defined in claim 1, wherein the first
2 circuit board has a third signal conducting means formed
3 therein, wherein the second circuit board has a fourth
4 signal conducting means formed therein, the third signal
5 conductor being shielded by a third electrically conductive
6 shield, the fourth signal conducting means being shielded by
7 a fourth electrically conductive shield, further comprising
8 the steps of:
9 forming a third opening in the third electrically
10 conductive shield so as to expose the third signal
11 conducting means in the first circuit board;
12 forming a fourth opening in the fourth electrically
13 conductive shield so as to expose the fourth signal
14 conducting means in the second circuit board;
15 applying an electrically conductive adhesive, solder
16 paste, or interposer/elastomer device around at least one of
17 the third and fourth openings and within at least one of the
18 third and fourth openings; and
19 securing the first circuit board and the second circuit
20 board such that the third opening and the fourth opening are
21 aligned and another signal propagating along the third

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22 signal conducting means is electrically interconnected to
23 the fourth signal conducting means.

1 10. The method as defined in claim 9, wherein the third
2 electrically conductive shield is electrically connected to
3 the first electrically conductive shield, wherein the fourth
4 electrically conductive shield is electrically connected to
5 the second electrically conductive shield.

1 11. The method as defined in claim 1, wherein the first
2 circuit board is a motherboard, wherein the second circuit
3 board is a daughterboard.

1 12. The method as defined in claim 11, wherein the
2 daughterboard is formed at least partially of flexible
3 material so as to allow angular mating with the motherboard.

1 13. A system for electrically interconnecting a signal
2 between circuit boards, the system comprising:

3 a first circuit board having, a first signal conducting
4 means formed therein, the first signal conducting means
5 being shielded by a first electrically conductive shield,
6 the first electrically conductive shield having a first
7 opening formed therein so as to expose the first signal
8 conducting means in the first circuit board;

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cont

9 a second circuit board having a second signal
10 conducting means formed therein, the second signal
11 conducting means being shielded by a second electrically
12 conductive shield, the second electrically conductive shield
13 having a second opening formed therein so as to expose the
14 second signal conducting means in the second circuit board;
15 and

16 an electrically conductive adhesive, solder paste, or
17 interposer/elastomer device applied surrounding at least one
18 of the first and second openings and within at least one of
19 the first and second openings;

20 wherein the first circuit board and the second circuit
21 board are electrically interconnected by the electrically
22 conductive adhesive, solder paste, or interposer/elastomer
23 device such that the first opening and the second opening
24 are aligned and a signal propagating along the first signal
25 conducting means is electrically interconnected to the
26 second signal conducting means.

1 14. The system as defined in claim 13, further comprising:

2 electrically conductive adhesive or solder paste within
3 a first via located within the first opening and within a
4 second via located within the second opening.

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1 15. The system as defined in claim 13, wherein the first
2 signal conducting means comprises a pair of signal
3 conductors and the second signal conducting means comprises
4 a pair of signal conductors.

1 16. The system as defined in claim 15, wherein the first
2 signal conducting means and the second signal conducting
3 means each comprise a single conductor.

1 17. The system as defined in claim 13, wherein the first
2 circuit board and the second circuit board are multilayer
3 circuit boards, wherein the first electrically conductive
4 shield and the second electrically conductive shield are
5 respective electrically conductive layers of the first
6 circuit board and the second circuit board.

1 18. The system as defined in claim 13, wherein the first
2 electrically conductive shield and the second electrically
3 conductive shield are formed by respective ground plane
4 layers of the first circuit board and the second circuit
5 board.

8 wherein the second circuit board has a fourth signal
9 conducting means formed therein, wherein the fourth signal
10 conducting means is shielded by a fourth electrically
11 conductive shield, wherein a fourth opening is formed in the
12 fourth electrically conductive shield so as to expose the
13 fourth signal conducting means in the second circuit board;

14 wherein an electrically conductive adhesive, solder
15 paste, or interposer/elastomer device is applied around at
16 least one of the third and fourth openings and within at
17 least one of the third and fourth openings; and

18 wherein the first circuit board and the second circuit
19 board are positioned such that the third opening and the
20 fourth opening are aligned and a another signal propagating
21 along the third signal conducting means is electrically
22 connected to the fourth signal conducting means.

1 22. The system as defined in claim 21, wherein the
2 third electrically conductive shield is electrically
3 connected to the first electrically conductive shield,
4 wherein the fourth electrically conductive shield is
5 electrically connected to the second electrically conductive
6 shield.

1 23. The system as defined in claim 13, wherein the
2 first circuit board is a motherboard, wherein the second
3 circuit board is a daughterboard.

1 24. The system as defined in claim 22, wherein the
2 daughterboard is formed at least partially of flexible
3 material so as to allow angular mating with the motherboard.

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25. A method for electrically interconnecting at least one signal between a first circuit board and a second circuit board, the first circuit board having a first signal conducting means formed therein, the second circuit board having a second signal conducting means formed therein, the first signal conducting means being shielded by an electrically conductive shield, the method comprising the steps of:

forming an opening in the electrically conductive shield so as to expose the first signal conducting means in the first circuit board;

applying an electrically conductive adhesive, solder paste, or interposer/elastomer device surrounding the opening and within the opening; and

positioning the first circuit board and the second circuit board such that the first signal conducting means and the second signal conducting means are aligned through the opening and a signal propagating along the first signal conducting means is electrically interconnected to the second signal conducting means.

3 a first circuit board having a first signal conducting
4 means formed therein, the first signal conducting means
5 being shielded by a first electrically conductive shield,
6 the first electrically conductive shield having a first

29. The system as defined in claim 28, wherein the first signal conducting means comprises a first pair of conductors and the second signal conducting means comprises a second pair of conductors and each conductor of the first pair is connected with a conductor of the second pair for transmission of two signals between the first pair and the second pair.

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